

REMARKS

Status Of Application

Claims 1-17 were pending in the application; the status of the claims is as follows:

Claim 17 has been cancelled by this amendment.

Claims 1-10 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,768,483 to Maniwa et al. (hereinafter the "Maniwa Patent").

Claims 11-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of the Maniwa Patent and U.S. Patent No. 5,995,718 to Hiraike et al. (hereinafter the "Hiraike Patent").

Claim Amendments

Claims 1-3, 6, 7, 9, and 11-16 have been amended to more particularly point out and distinctly claim the invention. Claims 12-15 have been amended to revise the preamble for clarity. It is noted for the record that the word "is" was included in claim 11 in the clean claims presented in the amendment mailed on April 19, 2001, but the underlining therefor was inadvertently not included in the marked up version of claim 11.

35 U.S.C. § 102(e) Rejection

The rejection of claims 1-10 under 35 U.S.C. § 102(e), as being anticipated by the Maniwa Patent, is respectfully traversed based on the following.

Claim 1 is directed to a device for selecting a network-connected image forming apparatus from a plurality of network-connected image forming apparatuses, where at least one of the plurality of image forming apparatuses has a specific mode, the device comprising:

a controller for selecting one of the plurality of image forming apparatuses connected with the network, **wherein when an input job has a specific mode, said controller selects an image forming apparatus which has the specific mode of the input job and which stores a prior job having the specific mode of the input job, and said controller registers the input job in the selected image forming apparatus.**

(Emphasis added)

Claim 1 requires that the controller operate such that when an input job has a specific mode, the controller selects an image forming apparatus which has the specific mode of the input job and which stores a prior job having the specific mode of the input job, and the controller registers the input job in the selected image forming apparatus.

The operation of the system and method of the Maniwa patent as disclosed are fundamentally different than the apparatus of claim 1 of the present invention. The Maniwa patent discloses:

A server machine which **queues print jobs time-sequentially**. NIC takes out the print jobs on the server machine job by each job and transfers each print job to a printer controller, the printer controller executes each of the print jobs, the printer controller generates an appropriate message according to whether a print job has been completed or interrupted. NIC . . . transfers the message to the corresponding client machine, and the client machine automatically displays contents of the message.

See Abstract

That is to say, the server of the Maniwa patent queues print jobs time-sequentially (first in time, first in line to be sent to the print controller) and the print jobs are sent to a printer controller for execution time-sequentially by an available printer which does not have any stored jobs i.e., (first in line is sent for printing to the first available printer which does not have waiting print jobs).

According to the Maniwa patent, "It is a first object of the present invention to generate a correct message according to whether a printer is in a state where a print job has been completed or in a state where a print job has been disabled for the some reason or other so that correct message can be reported to a user.

It is a second object of the present invention to provide a function in which the convenience of work and the workability in inputting therein image data from a scanner through a network are improved.

It is a third object of the present invention to provide a function in which, in a network printing/scanning system with the copier as the base of the system, a correct message is generated according to whether a printer is in a state where a print job has been completed or in a state where a print job has been disabled, the message is reported to a user, and furthermore the convenience of work and the workability in inputting therein image data from a copier through the network are improved.

Col. 2, line 55 through Col. 3, line 5

That is to say, a message reporting the status of the print job is sent informing the user whether a job is completed or whether the printer is hung and cannot complete the print job. No input print job is sent to a printer until the previous print job for the printer is completed.

The Maniwa patent also discloses the possibility of a user defined print queue. However, when a print job is generated by the printer driver, it is transferred to a print queue on the file server through the network (LAN). The printer queue function queues print jobs transferred in the WSs 103 on the network 101 in the inputted order (namely, time-sequentially).

Then, PSERVER (software for inputting a print job) on the NIC 106 takes out a print job from the print queue on the file server 104 through the network 101, and transfers the print job taken out above to the scanner/printer controller 107.

The scanner/printer controller 107 accumulates the inputted print jobs in a local print queue of the scanner/printer controller 107.

The scanner/printer controller 107 takes out a print job time-sequentially from the local print queue, transfers the job to the available copier 105 and makes the copier 105 execute the print job.

...the scanner/printer controller 107 then generates the corresponding message when a printout is actually completed in the copier 105 or when the job is suspended due to paper jam or paper out or the like therein, and transfers the message to the NIC 106. The NIC 106 transfers the inputted message to the MFSA.NLM on the file server 104. The MFSA.NLM of the file server 104 accumulates the message transferred from the NIC 106 in the message queue, then time-sequentially takes out the message, and delivers the message to an owner (WS 103) of the print job.

Col. 16 line 8 - col. 16, line 35 (Emphasis added)

According to the Maniwa patent, the method of reporting the print job is a multi-step process wherein the server machine receives the print job outputted from the plurality of client machines and, then, time-sequentially queues the print job for printing by an available printer. The time-sequentially queued print jobs are then transferred to the printer controller which carries out the print job. An appropriate message is generated based on the state of completion of the print job or on a state of suspension and returns the message together with the job ID to the network interface controller. The server machine time-sequentially queues the message with the job ID included therein received from the printer controller through the network interface controller and checks the job ID and in a case where the specified job owner exists on the network, the server machine immediately transfers the message to the corresponding client machine to report the state of a job or suspension of a job to a user. (Col. 3, lines 6-39). The Maniwa patent does not disclose a **controller for selecting one of the plurality of image forming apparatuses connected with the network, wherein when an input job has a specific mode, said controller selects an image forming apparatus which has the specific mode of the input job and which stores a prior job having the specific mode of the input job, and said controller registers the input job in the selected image forming apparatus.** In actuality, as discussed above, the Maniwa patent discloses a controller which locates a printer without a stored print job and transfers the next print job in line to that printer. As the Maniwa patent does not disclose each and every limitation of claim 1 of the present application, claim 1 is not anticipated by the Maniwa patent.

Claims 2-10 depend either directly or indirectly from non-anticipated independent claim 1. Therefore, whether or not the additional limitations of claims 2-10 are found in the Maniwa patent, as claims 2-10 depend from non-anticipated independent claim 1, they too are not anticipated by the Maniwa patent.

Accordingly, it is respectfully requested that the rejection of claims 1-10 under 35 U.S.C. § 102(e) as being anticipated by the Maniwa Patent, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

The rejection of claims 11-17 under 35 U.S.C. § 103(a), as being unpatentable over the combination of the Maniwa Patent and the Hiraike Patent, is respectfully traversed based on the following.

Claim 11 is directed to an image forming apparatus connected with a network through a network controller, said image forming apparatus comprising:

a memory for storing jobs;
discriminating means for discriminating whether any of the jobs stored in the memory has a specific mode in order to determine a status of the memory; and
reporting means for reporting the status of the memory to the network controller such that the network controller can determine whether or not to route an input job to the image forming apparatus.

(Emphasis added)

The Maniwa patent does not disclose or suggest discriminating means **for discriminating whether any of the jobs stored in the memory is a specific mode job** in order to determine a status of the memory. More importantly, the Maniwa patent does not disclose or suggest reporting means for reporting the status of the memory to the network controller **such that the network controller can determine whether or not to route a specific mode job to the image forming apparatus**. Also, as acknowledged in the Office Action, “Maniwa does not disclose the scanner/printer controller to report the status of the memory”. Neither does it report the status of the memory to the network controller such that the network controller can determine whether or not to route a specific mode job to the image forming apparatus. Therefore, claim 11 is not obvious with respect to the Maniwa patent.

The device of the Hiraike patent is directed to:

In an information processing apparatus for causing a printer to execute a printing operation by registering a font therein, there is disclosed a configuration allowing the information processing apparatus to manage the font to be registered in the printer thereby preventing the failure in the printing operation. The information processing apparatus issues a command for reserving a memory for font registration in the printer, then calculates the available capacity based on the reserved memory capacity at the transfer of the font to the printer, and executes transfer or deletion of the font based on the thus calculated available capacity.

(See Abstract).

According to Hiraike, the status request command returns information regarding available printer memory capacity 3003.

Based on the available capacity information 3002 of the registration memories returned to the host, the host determines the memory capacity and the memory (volatile memory 2022 or non-volatile memory 2023) to be used for the font registration, and issues a registration memory request command 3005 for reserving such memory capacity.

(Col. 6, lines 1-14).

There is no disclosure nor suggestion in Hiraike of an image forming apparatus connected with a network through a network controller, said image forming apparatus comprising: a memory for storing jobs; discriminating means for discriminating whether any of the jobs stored in the memory is a specific mode job in order to determine a status of the memory; and reporting means for reporting the status of the memory to the network controller such that the network controller can determine whether or not to route an input job to the image forming apparatus. Therefore, claim 11 is not obvious with respect to the Hiraike patent.

Further, there is no motivation or suggestion to combine the references nor would such a combination provide the same apparatus or same function of the apparatus of claim 11 of the present application. Therefore, claim 11 is not obvious with respect to either the Maniwa patent or the Hiraike patent or with respect to the Maniwa patent in view of the Hiraike patent.

As claims 12-15 depend either directly or indirectly from non-obvious independent claim 11, they too are not obvious with respect to either the Maniwa patent or the Haraike patent or with respect to the Maniwa patent in view of the Hiraie patent.

Claim 16 is directed to a network system and comprises:

a network for transmitting data;
a plurality of image forming apparatuses connected with said network and each of the plurality of image forming apparatuses having a memory for storing jobs;
discriminating means for discriminating a status of the memory based on whether the memory stores a job having a specific mode;
reporting means for reporting to the network the status of the memory of any of the plurality of image forming apparatuses whose memory stores a job having the specific mode; and
a control device for selecting one of said plurality of image forming apparatuses connected with the network and registering an input job in the selected image forming apparatus, wherein said control device selects an image forming apparatus storing a job having the specific mode when the input job has the specific mode.

(Emphasis added)

Claim 16 requires a discriminating means for discriminating a status of the memory based on whether the memory stores a specific mode job; a reporting means for reporting to the network the status of the memory of any of the plurality of image forming apparatuses whose memory stores a specific mode job; and a control device for selecting one of said plurality of image forming apparatuses connected with the network and registering an input job in the selected image forming apparatus, wherein said control device selects an image forming apparatus storing a specific mode job, having a predetermined specific mode, when the input job is a specific mode job having the predetermined specific mode.

In contrast, neither the Maniwa patent nor the Haraie patent, either singly or in combination, requires discriminating means for discriminating a status of the memory based on whether the memory stores a specific mode job; a reporting means for reporting to the network the status of the memory of any of the plurality of image forming apparatuses whose memory stores a specific mode job; and a control device for selecting

one of said plurality of image forming apparatuses connected with the network and registering an input job in the selected image forming apparatus, wherein said control device selects an image forming apparatus storing a specific mode job having a predetermined specific mode when the input job is a specific mode job having the predetermined specific mode. Further, a combination of the two references would not provide the network system of claim 16 of the present invention. Therefore, claim 16 is not obvious with respect to the Maniwa patent or the Haraike patent, either singly or in combination.

Accordingly, it is respectfully requested that the rejection of claims 11-16 under 35 U.S.C. § 103(a), as being unpatentable over the combination of the Maniwa Patent and the Hiraiki Patent, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

and not submitted herewith should be charged to Sidley Austin Brown & Wood's Deposit Account No. 18-1260. Any refund should be credited to the same account.

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following is a marked-up version of the changes to the claims which are being made in the attached response to the Office Action dated July 18, 2001.

IN THE CLAIMS:

1. (Twice Amended) A device for selecting a network-connected image forming apparatus from a plurality of network-connected image forming apparatuses, where at least one of the plurality of image forming apparatuses [having] has a specific [mode job,] mode, the device comprising:

a controller for selecting one of the plurality of image forming apparatuses connected with the network, wherein when [the] an input job has a specific mode, said controller selects an image forming apparatus which has the specific mode of the input job and which stores [storing] a prior job having the specific mode of the input job, and [job,] said controller registers the input job in the selected image forming apparatus.

2. (Twice Amended) A device according to claim 1, wherein said selected image forming apparatus is adapted to form images of a job having the specific mode [job] which requires temporarily stopping the selected image forming apparatus.

3. (Twice Amended) A device according to claim 2, wherein said selected image forming apparatus has a manual [feed] paper feeding [supply] specific mode.

4. (Twice Amended) A device according to claim 2, wherein said selected image forming apparatus is adapted to form an image of a job possessing [a] the specific mode requiring changing paper positioned in the selected image forming apparatus.

6. (Twice Amended) A device according to claim 1, wherein said controller selects one of the plurality of image forming apparatuses not storing a job of the specific mode [job] when the input job does not have [a] the specific mode.

7. (Twice Amended) A device according to claim 1,
wherein each of said plurality of image forming apparatuses has a memory for storing jobs, and
wherein said controller selects an image forming apparatus not storing a job in [a] the memory of the selected image forming apparatus when an image forming apparatus storing a job of the specific mode [job] cannot be referenced.

9. (Twice Amended) A device according to claim 1, wherein when said input job has the specific mode where the specific mode indicates a requirement for a specific size paper,

said controller receives information from [an] the plurality of image forming [apparatus] apparatuses regarding a size of paper in each of the image forming [apparatus,] apparatuses, and

wherein, when no image forming apparatus contains the specific size paper, said controller selects as a selected image forming apparatus an image forming apparatus storing a job having a different specific mode [job] and said controller registers [a] said input job in the selected image forming apparatus. [when no image forming apparatus has paper suitable for the job.]

11. (Twice Amended) An image forming apparatus connected with a network through a network controller, said image forming apparatus comprising:

a memory for storing jobs;

discriminating means for discriminating whether any of the jobs stored in the memory has [is] a specific mode [job] in order to determine a status of the memory; and

reporting means for reporting the status of the [memory.] memory to the network controller such that the network controller can determine whether or not to route an input job to the image forming apparatus.

12. (Twice Amended) An image forming apparatus according to claim 11, wherein said memory stores a job having the specific mode [job] requiring temporary stoppage of the image forming apparatus.

13. (Twice Amended) An image forming apparatus according to claim 12, wherein said memory stores a job having the specific mode [job] requiring a selected image forming apparatus having a manual [feed] paper [supply] feeding mode.

14. (Twice Amended) An image forming apparatus according to claim 12, wherein said memory stores a job having the specific mode [job] requiring changing paper positioned in the selected image forming apparatus.

15. (Twice Amended) An image forming apparatus according to claim 12, further comprising:

image forming means for forming images on recording medium in order of the sequence of jobs stored in said memory.

16. (Twice Amended) A network system comprising:

a network for transmitting data;

a plurality of image forming apparatuses connected with said network and each of the plurality of image forming apparatuses having a memory for storing jobs;

discriminating means for discriminating a status of the memory based on whether the memory stores a job having a specific mode; [job indicating a status of the memory;]

reporting means for reporting to the network the status of the [memory;] memory of any of the plurality of image forming apparatuses whose memory stores a job having the specific mode; and

a control device for selecting one of said plurality of image forming apparatuses connected with [a] the network and registering [a] an input job in the selected image forming apparatus, wherein said control device selects [a predetermined] an image forming apparatus storing a job having the specific mode when the input job [is a] has the specific mode. [job.]

Serial No. 09/151,521

Claim 17 has been cancelled.